

Table I

Nature of the additives added to the commercial latex Duramul	Brand name of the additives tested (Rhodia products)	% addition (dry/dry) of the additive in the latex emulsion	Compatibility and stability of the latex/additive mixture	The mixtures and the control latex are deposited by spraying them on the fresh cement molding Observation of the film after 24 hours and after aging for 24 days, under ambient laboratory conditions	Rating
Control	-	0	OK	Poorly formed film breaks up on aging	..--
Amphiphilic water-soluble maleic anhydride/ isobutylene copolymer according to the invention	Geropon T36	1	OK	Attractive film appearance - glossy, homogeneous, highly hydrophobic and stable under aging	.++++
Amphiphilic water-soluble maleic anhydride/ isobutylene copolymer according to the invention	Geropon T36	3	OK	Attractive film appearance - glossy, homogeneous, highly hydrophobic and stable under aging	.++++
Amphiphilic water-soluble butyl acrylate/ styrene/ methacrylic acid terpolymer	Bevaloid 6857	1	OK	Uniform, attractive appearance, hydrophobic film	.++
Amphiphilic water-soluble butyl acrylate/ styrene/ methacrylic acid terpolymer	Bevaloid 6857	3	OK	Uniform appearance, hydrophobic but discontinuous film	..--
Water-soluble acrylic acid/ methacrylic acid copolymer MW 3500	Rhodoline 226/35	3	OK	Floury appearance, powdery film, hydrophilic behavior	..--
Water-soluble maleic acid/ methacrylic acid copolymer	Bevaloid 9	3	OK	Hydrophilic surface, film broken up and incorporated into the cement	..--

Nature of the additives added to the commercial latex Duramul	Brand name of the additives tested (Rhodia products)	% addition (dry/dry) of the additive in the latex emulsion	Compatibility and stability of the latex/additive mixture	The mixtures and the control latex are deposited by spraying them on the fresh cement molding. Observation of the film after 24 hours and after aging for 24 days, under ambient laboratory conditions	Rating
Acrylic acid/ methacrylic acid copolymer of 10 000 Mw	Sopronyl AR 40	3	Gelling	Not tested, as emulsion unstable	.--
Adipic acid		1	OK	Uniform, attractive appearance, hydrophobic film	.++
			.++++	Very good	
		Rating	.++	Positive, but insufficient	
			.--	Poor, negative	

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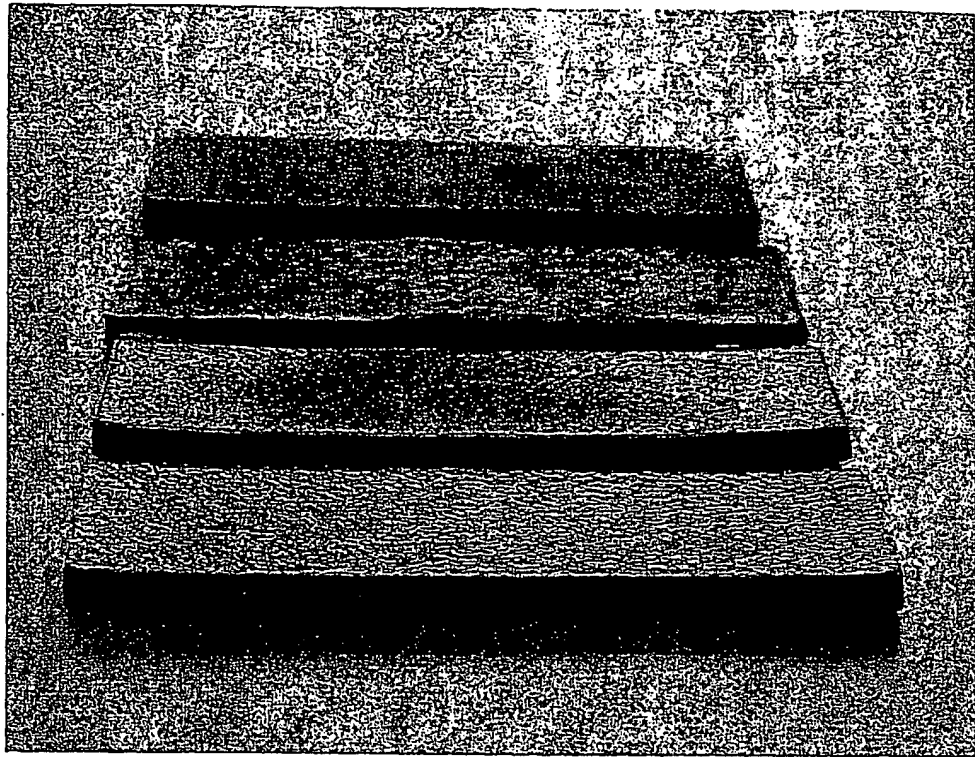


Figure 1

Appearance of the cement test pieces after aging for 5 months at ambient temperature and humidity

Test piece 1 (at the top): control, uncoated test piece

Test piece 2 coated with just the latex (line 1 of Table I, page 1/3)

Test piece 3 coated with the latex/polymer mixture not according to the invention (line 4 of Table I, page 1/3)

Test piece 4 coated with the latex/polymer mixture according to the invention (line 2 of Table I, page 1/3)